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APPARATUS FOR PERFORMING A DISCECTOMY THROUGH A TRANS-SACRAL AXIAL BORE WITHIN THE VERTEBRAE OF THE SPINE

ABSTRACT OF THE DISCLOSURE

Methods and apparatus for and performing a partial or complete discectomy of an intervertebral spinal disc accessed by one or more trans-sacral axial spinal instrumentation/fusion (TASIF) axial bore formed through vertebral bodies in general alignment with a visualized, trans-sacral anterior or posterior axial instrumentation/fusion line (AAIFL or PAIFL) line. A discectomy instrument is introduced through the axial bore, the axial disc opening, and into the nucleus to locate a discectomy instrument cutting head at the distal end of the discectomy instrument shaft within the nucleus. The cutting head is operated by operating means coupled to the instrument body proximal end for extending the cutting head laterally away from the disc opening within the nucleus of the intervertebral spinal disc and for operating the cutting head to form a disc cavity within the annulus extending laterally and away from the disc opening or a disc space wherein the disc cavity extends through at least a portion of the annulus. A discectomy sheath that is first introduced to extend from the skin incision through the axial bore and into the axial disc opening having a discectomy sheath lumen that the discectomy instrument is introduced through. The discectomy sheath is preferably employed for irrigation and aspiration of the disc cavity or just aspiration if irrigation fluids are introduced through a discectomy instrument shaft lumen. The cutting head of the discectomy tool is deflected from the sheath lumen laterally and radially toward the annulus using a deflecting catheter or pull wire.

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